

ABSTRACT OF THE DISCLOSURE

Prepared is brightness frequency data that indicates the number of pixels, having the same brightnesses in a brightness distribution for each of the fields represented by an input image signal. Based on the brightness frequency data, the number of subfields for emission at each brightness in a brightness region is adjusted for each of at least two brightness regions. As a result, the greater the frequency indicating the total number of pixels at each of the same brightnesses in a brightness region, the larger the number of subfields allocated to that brightness region. Therefore, satisfactory grayscale representation suitable to human visual characteristics is achieved.